

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A prefabricated sealing membrane, having high stability to UV exposure and formed of a support or reinforcement, the support or reinforcement being one of coated on at least one surface and impregnated throughout, with a modified bitumen base composition, characterized in that the thermoplastic bituminous coating and or impregnation composition is a bituminous binder modified by a thermoplastic polyurethane having the following weight proportion:

- ~~40 to 90%~~ 60 to 80% bitumen,
- ~~10 to 50%~~ 15 to 40% thermoplastic polyurethane,
- ~~0 to 10%~~ 0 to 5% aromatic oil,
- ~~0 to 50%~~ 0 to 40% filler,
- 0 to 0.5% catalyst,

the modified bituminous binder adapted to be softened by reheating and recover its properties after subsequent cooling,  
the prefabricated membrane being adapted for application by heating by torch welding or hot air,

the prefabricated sealing membrane highly stable to UV exposure, wherein

the thermoplastic polyurethane is obtained from a diisocyanate of a functionality substantially equal to 2, a polyol of functionality substantially equal to 2, and a chain elongation agent,

the polyurethane molecules are free of double carbon-carbon bonds, and

the polyols are free of ethylene linkages.

2. (currently amended) The membrane according to claim 1, characterized in that the bituminous composition has the following weight proportion:

- 60 to 80% bitumen,
- ~~15 to 40%~~ 20 to 30% thermoplastic polyurethane,
- ~~0 to 5%~~ 0 to 2% aromatic oil,
- ~~0 to 40%~~ 10 to 20% filler,
- ~~0 to 0.5%~~ 0 to 0.2% catalyst.

3. (previously presented) The membrane according to claim 1, characterized in that the bituminous composition contains also between 0.01 and 20% by weight of one or several additives improving adhesion, resistance to fire or to flames and/or resistance to roots, of said composition.

4. (canceled)

5. (previously presented) The membrane according to claim 1, characterized in that the thermoplastic polyurethane is constituted by a quantity of hard segments comprised between 10 and 40%.

6. (previously presented) The membrane according to claim 1, characterized in that the material or materials forming the filler is or are selected from the group of mineral fillers formed by chalk, silica, talc, dolomite, kaolin and mixtures of two or several of these substances.

7-12. (canceled)

13. (previously presented) The membrane of claim 1, wherein,

the support or reinforcement comprises plural fibrous backings impregnated throughout.

14. (previously presented) The membrane of claim 1, wherein,

the support or reinforcement comprises a coated fibrous backing.

15. (currently amended) A prefabricated sealing membrane having high stability to UV exposure, comprising:

a support in the form of a fibrous backing; and

a modified bitumen base composition applied to a surface of the support or impregnated throughout the support,

the modified bitumen base composition comprising

~~40 to 90%~~ 60 to 80% bitumen,

~~10 to 50%~~ 15 to 40% thermoplastic polyurethane,

~~0 to 10%~~ 0 to 5% aromatic oil,

~~0 to 50%~~ 0 to 40% filler, and

0 to 0.5% catalyst,

the modified bituminous base composition being thermoplastic, softening under action of heat ~~from torch welding~~ and recovering its properties after subsequent cooling, and

the prefabricated sealing membrane being adapted for application by torch welding or hot air and highly stable to UV exposure, wherein,

the thermoplastic polyurethane comprises a diisocyanate, a polyol, and a chain lengthening agent,

the thermoplastic polyurethane molecules are free of double carbon-carbon bonds,

the polyols are free of ethylene linkages,

the functionality of the polyols is between 1.95 and 2.05, and

the functionality of the isocyanates is between 2.0 and 2.1.

16. (canceled)

17. (previously presented) The membrane of claim 15, wherein a ratio of isocyanate/polyol is between 1.0 and 1.1.

18. (previously presented) The membrane of claim 15, wherein a ratio of isocyanate/polyol is about 1.05.

19. (previously presented) The membrane of claim 15, wherein the modified bitumen base composition comprises 20 to 30% thermoplastic polyurethane.

20. (canceled)

21. (previously presented) The membrane of claim 1,  
wherein,

the functionality of the polyols is between 1.95 and  
2.05, and

the functionality of the isocyanates is between 2.0 and  
2.1.

22. (previously presented) The membrane of claim 21,  
wherein a ratio of isocyanate/polyol is between 1.0 and 1.1.

23. (previously presented) The membrane of claim 1,  
wherein a ratio of isocyanate/polyol is about 1.05.

24. (currently amended) A prefabricated sealing  
membrane having high stability to UV exposure, comprising:

a support; and

a modified bitumen base composition applied to the  
support,

the modified bitumen base composition comprising

~~40 to 90%~~ 60 to 80% bitumen,

~~10 to 50%~~ 15 to 40% thermoplastic polyurethane,  
comprising a diisocyanate, a polyol, and a chain lengthening  
agent,

~~0 to 10%~~ 0 to 5% aromatic oil,

~~0 to 50%~~ 0 to 40% filler, and

0 to 0.5% catalyst,

the modified bituminous base composition being  
thermoplastic, softening under action of heat ~~from torch welding~~

and recovering its properties after subsequent cooling so that the prefabricated sealing membrane is suitable for application by torch welding or hot air, and

the prefabricated sealing membrane being highly stable to UV exposure, wherein,

the thermoplastic polyurethane molecules are free of double carbon-carbon bonds,

the isocyanate and polyol are present in a ratio of isocyanate/polyol is between 1.0 and 1.1,

the polyols are free of ethylene linkages, and

the functionality of the polyols is between 1.95 and 2.05.